

COUNTY OF LOS ANGELES FIRE DEPARTMENT

FIRE PREVENTION DIVISION

INDUSTRIAL BAKING OR DRYING OVEN PERMIT REQUIREMENTS

Article 1, section 105 of the Los Angeles County Fire Code states... a permit shall be obtained from the Fire Prevention Division prior to engaging in the following: ... to operate an industrial baking or drying oven regulated by Article 62. Additional requirements may be applicable.

<u>LOCATION AND CONSTRUCTION</u> When locating ovens, oven heaters and related equipment, the possibility of fire resulting from overheating or from the escape of fuel gas or fuel oil and the possibility of damage to the building and injury to persons resulting from explosion shall be considered.

<u>Elevation</u> Ovens shall be at or above grade. Exception: Ovens are allowed in basements having at least 50 percent of the wall area of the room in which the oven is located above grade.

<u>Clearances</u> Ovens shall be readily accessible for inspection and maintenance and shall have adequate clearances to allow the proper functioning of explosion vents. Roofs and floors of oven shall be sufficiently insulated and ventilated to keep temperatures at combustible ceiling and floors below 160°F. (71.1°C).

<u>Construction</u> Ovens with a maximum operating temperature exceeding 160°F (71.1°C) shall be constructed of noncombustible materials. The amount of insulation used in the oven panel construction shall be adequate to prevent the outside surface temperature from exceeding 160°F (71.1°C), or adequate guards shall be provided to protect personnel.

<u>Explosion Control</u> Ovens which could contain flammable air-gas mixtures shall be equipped with explosion venting.

<u>Ducts</u> Ducts shall be constructed of noncombustible material. Ducts shall be tight and shall not have openings other than those required for proper operation and maintenance of the system. Ducts passing through combustible walls, floors or roofs shall have adequate insulation and clearances to prevent surface temperatures from exceeding 160°F (71.1°C). Exhaust ducts shall not discharge near doors, windows or other air intakes in a manner that will risk reentry of vapors into the building.

<u>VENTILATION</u> Ovens in which flammable or toxic vapors are liberated or through which products of combustion are circulated shall be ventilated by the introduction of fresh air and proper exhaust to outdoors. Discharge pipes shall not terminate within 10 feet (3048 mm), measured horizontally, from doors, windows or wood frame walls of buildings. Oven ventilation shall be arranged to provide vigorous and well-distributed air circulation within the oven and to ensure that the flammable vapor concentration will be below the lower explosive limit at all times.

Unless the oven is operated in accordance with specific approval specifying particular solvents and the rate of ventilation, the rate of ventilation shall not be less than 10,000 cubic feet of fresh air per gallon of solvent evaporated (74.8 m³/L) in continuous process ovens and not less than 380 cubic feet per minute per gallon (0.047 m³/s per L) of flammable solvent evaporated in batch process ovens.

<u>Duct Intake Openings</u> Exhaust duct intake openings shall be located in the area of greatest concentration of vapors.

Conveying Means Exhaust shall be conveyed by mechanical means using power-driven fans.



<u>SAFETY CONTROLS</u> Safety controls specified in U.F.C. Standard 62-1 shall be provided in sufficient number and substantially constructed and arranged to maintain the required conditions of safety and prevent the development of fire and explosion hazards.

<u>Ventilation Controls</u> Suitably interlocked ventilation controls shall be provided which will ensure required ventilation of the system.

<u>Fuel-safety Controls</u> Suitably interlocked fuel-safety controls shall be provided and arranged to minimize the possibility of dangerous accumulations of explosive air-fuel mixtures in the heating system.

<u>Excess Temperature Controls</u> Excess temperature controls shall be provided to maintain a safe operating temperature within the oven.

<u>Conveyor Interlocks</u> Conveyor interlocks shall be provided in conveyor ovens having a flammable vapor hazard such that the conveyor cannot move unless ventilating fans are operating and discharging the required volume of air.

Additional			
Requirements			
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